

AMENDMENTS TO THE SPECIFICATION

Please replace the first full paragraph of page 7 with the following amended paragraph:

If the control circuit determines that the calculated average power is higher than the intermediate reference value, it produces an ~~down~~^{up}-shift control signal that causes the bit shifter 5 to select from an interpolated M-bit sequence and L-bit sequence $\{(i-j+1) \text{ through } (i-j+L)\}$ that is shifted upwards by “k” bits with respect to the default bit positions as illustrated in Fig. 3, where the integer “j” represents the difference between the calculated average power and the intermediate reference value. Control circuit 4 proceeds to control the amplifier 7 by decrementing its gain by an integral multiple of 6dB, i.e., 6dB times the integer “j”. Since the j-bit upward-shifted L-bit sequence is 2^j times greater than the L-bit sequence which would be selected from the default bit positions, the complementary decrement of the amplifier gain by a factor 2^j controls the CNR value of the current higher-than-reference signal at the same value which would be obtained when the average power of the input signals is equal to the reference value.

Please replace the paragraph bridging pages 7 and 8 with the following amended paragraph:

If the ~~multiplexed amplitude data~~ whose calculated average power of the multiplexed data is equal to the intermediate reference value corresponding to the default bit-positions and designated as S_R/n , where n is the background noise.

Please replace the paragraph bridging pages 9 and 10 with the following amended paragraph:

Control circuit 84 controls the bit shifter 5 according to the difference between the calculated average power and the reference power level in a manner as described above. Control circuit 84 controls the gain of the amplifier 7 according to the difference between the calculated average power and the reference power level and the difference between the calculated average power and the actual power level of transmission. Thus, the gain of amplifier 7 is varied by an integral multiple of 6dB according to the difference between the calculated average power and the reference power level in a manner as described above, plus a scale factor “ α ” which varies with the difference between the calculated average power and the actual transmission power level of the power amplifier 9. This feedback arrangement serves to prevent the power amplifier 9 from varying its transmission power which would otherwise be caused by environmental conditions.

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure.

In a spread spectrum transmitter, a number of spread spectrum channel signals are multiplexed into a digital amplitude signal by a multiplexer, ~~(1)~~ and the time-average power of the digital amplitude signal is determined by an average calculator ~~(3)~~. The digital amplitude signal is interpolated by an interpolator ~~(2)~~, scaled according to a first scale factor by a bit shifter ~~(5)~~ and converted to an analog amplitude signal by a D/A converter ~~(6)~~. The analog amplitude signal is then scaled ~~by~~ according to a second scale factor in a gain controlled amplifier ~~(7)~~. The first and second scale factors are complementarily varied by a control circuit ~~(4)~~ according to the output ~~o~~f the average calculator ~~(3)~~ so that the carrier-to-noise ratio of the transmitter is maintained substantially constant regardless of the varying power level of the multiplexed signals.